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THE ORIGIN OF THE RED-FIGURED TECHNIQUE
IN ATTIC VASES¹

THE Museum of Palermo possesses a cylix of peculiar value aside from the fact that it bears the signature of Andocides; for among all the Greek vases which have as yet been found, it is unique in this respect, that it combines the black-figured with the red-figured technique *on the outside* of the same cylix, whereas it is usual among cylixes that show the mixed technique to have the interior in the black- and the exterior in the red-figured technique.²

¹ I wish to acknowledge my indebtedness to Dr. Hoppin, Lecturer on Vases at the American School at Athens in 1897-98, for kind assistance.

² The first list of cylixes which show both techniques was made by Otto von Jahn (*Vasensammlung zu Munich*, 1854, Einleitung, Anm. 1186). Afterward this list was greatly increased by Klein (*Euphronios*², p. 291). The following list adds five cylixes to those mentioned in Klein's list. All references to Klein are to the list as given in his *Euphronios*², pp. 291 ff., unless otherwise specified. I indicates the inside; A and B the designs on the outside.

CYLIXES WHICH HAVE THE MIXED TECHNIQUE WITH

A. *Interior black-figured and exterior red-figured.* [Except No. 21, eye-cylixes.]

1. Brit. Mus. E 3. Klein, No. 8. Hischylos and Epiktetos.
 - I. Youth mounted.
 - A. Silenus. B. A Silenus similar to A.
2. Brit. Mus. E 4. Klein, No. 3. Typheidides.
 - I. Doe. ὁ παῖς καλός.
 - A and B. Anthemion design between the eyes.
3. Munich 1021. Klein, No. 20. Memnon vase.
 - I. Bearded satyr running. ME ME MNON Καλός.
 - A. Mule. B. Nose.
4. Munich 1023. Klein, No. 15.
 - I. Youth wreathed and wearing a chlamys.
 - A. Wounded man crouching. B. Stag.
5. Munich 1232. Klein, No. 5.
 - I. Minotaur.
 - A. Armed warrior. καλός ὁ παῖς.
 - B. Man, bearded and wreathed, with a coil of rope in left hand.

It is well known that Andocides was a master of both styles and that he was fond of combining them, especially on vases

6. Munich 1240. Klein, No. 19.
I. Bearded satyr with wine-skin.
A. Armed youth. B. Nose.
7. Munich 111. Klein, No. 9. Memnon vase.
I. Mounted youth.
A. A youth. M N KA. B. Nose.
8. Paris, Cabinet des médailles. Klein, No. 18. Chelis.
I. Satyr with rhyton.
A. Youth with staff. B. Conventionalized plant.
9. Würzburg III, 358. Klein, No. 10. Epiktetos and Nikosthenes.
I. Youth with skyphos.
A. Satyr. B. Horse.
10. Louvre. Klein, No. 17. Nikosthenes.
I. Bearded man. . . KO<ΘENE<EΠOI . .
A. Youth. B. Ram.
11. Orvieto, Sammlung Faina. Klein, No. 2. Hischylos and Epiktetos.
I. Stag.
A. Youth running. B. Wanting.
12. Copenhagen, Müller, Mus. Thorwaldsen 93. Klein, No. 4.
I. Doe.
A and B. Nose.
13. ? Klein, No. 6. Pamphaios.
I. Armed warrior.
A. Minotaur. B. Vase with high foot.
14. *Cat. Campana*, Ser. VI-VII, 113. Klein, No. 7.
I. Archer.
A and B. A discobolus.
15. Rome, Museo Gregoriano. Klein, No. 11. Pamphaios (?).
I. A youth. $\delta \pi \alpha \hat{\iota} \varsigma \kappa \alpha \lambda \acute{o} \varsigma$.
A. A youth with staff. B. A youth stooping.
16. Petersburg, Sammlung der Akademie. Klein, No. 12. Hischylos and Epiktetos.
I. Youth.
A. Bearded man. B. Mule.
17. Copenhagen, Mus. Thorwaldsen 92. Klein, No. 13.
I. Youth with drinking-horn in each hand.
A. A youth with two staves. B. A warrior stooping.
18. *Bull. dell' Inst.* 1881, p. 246. Klein, No. 14.
I. A youth running.
A. Youth crowned, with taenia. B. Youth extending left hand.
19. Würzburg III, 357. Klein, No. 16. Hischylos.
I. Youth with chlamys.
A. Man raising helmet from the ground. $\delta \pi \alpha (\hat{\iota}) \varsigma \kappa \alpha \lambda \acute{o} \varsigma$.
B. Youth with discus in his hand. $\kappa \alpha \lambda \acute{o} \varsigma \delta \pi \alpha (\hat{\iota}) \varsigma$.

of his favorite shape,—the amphora;¹ but unlike most vase-painters who had both styles at their command, he seems to

20. Coll. N. Desverger 102. Klein, No. 21. Memnon vase.
 - I. Poseidon with trident and fish.
 - A and B. A stork.
 21. *Cat. Campana*, Ser. VI-VII, 625. Klein, No. 22.
 - I. Poseidon with trident.
 - A. Herakles and Nemean lion.
 - B. One Silenus holding a horse by his tail while a second places a wine-skin upon the horse.
 22. ? Klein, No. 1. Hischylos.
 - I. A stag.
 - A. A youth with leaping-weights.
 - B. An object resembling a stump.
 23. [Klein, *Die griechischen Vasen mit Lieblingsinschriften*², p. 55, No. 5.] Memnon vase.
 - I. Warrior running.
 - A. Discobolus. B. A youth (partly broken).
 24. Rome, Kunsthandel (Luchetti). [Klein, *op. cit.* p. 55, No. 6.] Memnon vase.
 - I. A warrior.
 25. Brit. Mus. [Klein, *op. cit.* p. 54, No. 2.] Memnon vase.
 - I. Armed slinger.
 - A. Mule. B. Leaf.
- B. Interior red-figured and exterior black-figured.*
1. Palermo, Nat. Mus. [Hartwig, *Meisterschalen*, p. 88.]
 - I. A Silenus. *καλὸς* *κος*, which is restored *καλὸς* *Ἐπὶ* *λυκος*.
 - A and B. A flying Nike.
 2. Louvre. Klein, p. 296. Epilykos.
 - I. A youth balancing a huge amphora.
 - A. Herakles. B. Cynus (?).
 3. *Bull.* 1879, p. 154, "aus Suessela." Klein, p. 296.
 - I. In fully developed red-figured technique. A and B. The exterior has a Silenus under each handle.
- C. Exterior partly black-figured and partly red-figured.* No interior decoration.
1. Palermo. Andocides cylix. Klein, p. 296.
[Described fully below, in the text, pp. 330-332.]
- D. Interior partly black-figured and partly red-figured.* Exterior red-figured.
1. Brit. Mus. E 2.
 - I. Within a thin red circle, a youth in red-figured technique, wreathed and wearing a chlamys. Around this circle, in black-figured technique, a frieze of four galleys sailing to the left on waves.
 - A. Two youths. B. Two youths.

¹ Hoppin, *Euthymides*, p. 15. The first list of amphorae that show the mixed technique was made by Otto von Jahn (*Vasensammlung zu Munich*, Einleitung,

have been as fond of one as of the other, so that in his work the black-figured is not, as in other cases, made subordinate to the newer style.¹ In view of this fact, it need not seem strange that Andocides, who was a vase-painter possessed of some originality in his ideas, should have devised this means of giving each style equal prominence on this cylix.

This vase was found in Chiusi and was first published by Braun in 1838, and again by Schneider in 1889.² It is an eye-cylix of considerable size and depth, with a high foot, from which extends a circle of alternate red and black rays; one pair of eyes is black on a red ground; the other, red on black. Between the eyes on the black-figured side is a group, and between those on the red-figured side is a single figure; at each handle is a group of three figures, partly red-figured, partly black, the dividing line coming in the centre of the handle, so that each technique finds illustration on exactly one-half the

Anm. 494). Afterwards this list was increased by Klein (*Euphronios*², p. 36), and later by Schneider (*Jb. d. Arch. Inst.* 1889, p. 196, note 15), whose list is as follows:

- A. Andokides vase. s.f. dionysisch. r.f. Artemis, Apollon, Leto, Ares. Klein e.
- B. München 373. s.f. Heraklesabenteuer. r.f. dionysisch. ΗΙΡΟΚΡΑΤΕΣ
ΚΑΙΟΣ. Klein a.
- C. Brit. Mus. 608. s.f. losende Helden. r.f. Heraklesabenteuer. Klein g.
- D. München 388. s.f. Heraklesabenteuer. r.f. dionysisch. Klein c.
- [Furtwängler assigns this vase to Andocides. See Furtwängler und Reichhold, *Griechischen Vasenmalerei*, I, p. 15.]
- E. München 375. s.f. losende Helden. r.f. dionysisch. Klein b.
- F. Bourguignon. s.f. losende Helden. r.f. losende Helden.
- G. Bologna Mus. Civ. s.f. Heraklesabenteuer. r.f. dionysisch. Brizio S. 44.
- H. Louvre. s.f. dionysisch. r.f. Heraklesabenteuer. Klein f.
- I. Louvre. s.f. Brautzug. r.f. Cheiron, Achill.
- K. ? s.f. Herakles mit dem Stier. r.f. dasselbe. Klein d.

[This vase is now in the Boston Art Museum. For the subject, see Cecil Smith, *The Forman Collection, Cat. of Sale*, London, 1899, No. 305, with plate, and E. Robinson, *Twenty-fourth Annual Report of the Museum of Fine Arts at Boston* for 1899, p. 81, No. 36. Also, for a different interpretation of the vase, see Furtwängler und Reichhold, *op. cit.* I, p. 16 and note 2.]

- L. Würzburg, III, 51. s.f. Kampfszene. r.f. dionysisch. Klein h.

¹ Richard Norton, 'Andocides,' *Am. J. Arch.*, First Series, XI (1896), p. 1; but for a different view, see Furtwängler und Reichhold, *op. cit.* I, p. 17.

² *Bull. d. Inst.* 1838, pp. 83 ff.; *Jb. d. Arch. Inst.* 1889, pl. iv.

surface of the cylix. The vase shows well the characteristics of Andocides's style; the composition of the groups is good, the action rather free. The Greek love of symmetry is prominent here, while there is sufficient variety of detail to avoid monotony. This may be seen in the groups at the handles, which are, in their general composition, the same. Yet when we study the figures separately we find many differences in detail. The subject in each is the contest of two warriors over the body of a wounded hero; in each group one of the combatants and the fallen man show the black-figured technique with a wealth of detail brought out by incised lines, while on chlamys, cuirass, and crested helm, scabbard and shield, there is applied color in dark red, a common feature in Andocides's vases;¹ but the shield of the fallen warrior and the entire figure of the second combatant are red with details in black, or black with some red applied. As the fallen man is placed so that all except his left arm bearing the shield is in black-figured technique, while the shield is in the red-figured, the shield forms, whether intentionally or not, a transition between the two sides of the exterior; for while it is itself red on a black background, it serves as the background for a black-figured emblem, a tripod on one, a snake and balls on the other.

The same love of symmetry which we observe in these groups, we notice also in the group between the eyes on the black-figured side of the cylix; here two Scythian bowmen face each other, one on either side of a tree; each holds his bow in the left hand and his arrow in the right; one wears a quiver, the other has none; both have pointed beards; both are dressed in the usual Scythian costume with pointed cap and close-fitting long-sleeved garment reaching to the ankles; the pipings and ornaments are worked in incised lines. On the other side of the exterior, instead of a group, we have only a single figure with the Scythian dress, but beardless, wearing his bow and quiver at his side, and holding his trumpet to his lips with both hands; the action of the figure is rather striking in its naturalness, and

¹ Norton, *op. cit.* p. 9.

the drawing shows great delicacy. In dress this figure resembles the others, except that he wears no cap.

The artist's signature, which is written retrograde and is not wholly preserved, appears above one of the eyes on the black-figured side of the cylix.¹

This cylix shows in such a unique way the union of the two techniques, and, although it exhibits the red-figured style in a highly developed state, still preserves so clearly a reminiscence of the older style in the use of extra color in places and in the use of incised lines, that it suggests with peculiar force the problem as to the origin of the red-figured technique in Attic vases.

It may never be possible to find out just the year when this new method was introduced to the world, or the particular vase-painter who invented it,² but we may at least note some of the tendencies of the times which led to the conception of the idea, and trace some steps in the history of vase-painting and sculpture which may have suggested it to the mind of the artist.

It has been well said³ that the red-figured technique probably never had any development in the true sense of the term, but all at once flashed upon the mind of the artist as a fully developed idea. Yet an idea does not spring into being without some previous influences which have led to its birth; there must have been a process of growth, though perhaps unconscious, a period of struggle and experiment to obtain a certain effect. In the theories hitherto proposed as to its development, there has been a tendency to narrow the origin to one phase of art, and to pay too little attention to the interaction which must always

¹ This signature is over the eye to the left of the side that shows the black-figured technique, and reads thus :



² The inventor of the red-figured technique may have been Andocides, as Furtwängler suggests (Furtwängler und Reichhold, *op. cit.* I, p. 17), or Epictetus, as Hartwig claims (Hartwig, *Griechische Meisterschalen*, p. 12).

³ Norton, *op. cit.* p. 35 ; Schneider, *op. cit.* p. 203.

have existed between ceramics and sculpture;¹ this influence may have been somewhat unconscious, but was none the less potent in its results. If then we grant, as I think we must, this interaction between the two branches of art, we cannot seek for that which suggested the idea of the red-figured technique in either class of monuments to the exclusion of the other, nor can we accept any theory which does not consider *all* the methods of art expression that may have given rise to this technique.

In the first place, let us consider what the tendency of Greek art was in the sixth century B.C., and wherein lay the advantage of the new method over the old.

There was at this time a singularly strong tendency toward naturalism, and it undoubtedly had its effect on the vase-painters. It was also an age of experiment, of inventions, of steady progress toward the most effective use of color. Now it is nearer to nature to represent figures light in the masses with only details dark, standing out boldly from a dark background, than to represent them by a silhouette; the best method of obtaining this effect was the goal toward which the vase-painters were consciously or unconsciously striving. As in sculpture the order of development was from low relief to high relief, the background being gradually cut away deeper and deeper, until the figures stood out boldly from the field, so in vase-painting we find flat, dark figures on a light ground followed by light figures, all the modelling of which stands out distinctly from a dark ground.

On the red-figured side of the Palermo cylix we find, as I have said, a reminiscence of the older technique in the application of extra color in parts. This seems to be a trace of the so-called "polychrome technique," the principle of which may be traced back even beyond the Mycenaean period, as is clearly shown by certain vase-fragments found in Melos during the recent excavations there; it appears during the Mycenaean age in

¹ This connection has been treated suggestively by Brownson in an article published in the *Am. J. Arch.*, First Series, VIII (1893), pp. 28-41.

one class of vases and also on a grave stele ;¹ we find it in the early Cretan² and Argive vases, while those from Naucratis³ and a series from Rhodes⁴ show a marked tendency to polychrome decoration. It becomes a marked feature in the earlier black-figured vases, and continues more or less prominent in vase-painting until it finds its highest expression in the beautiful white lecythi of Athens during the second half of the fifth century and later.⁵

In one series of "polychrome" vases Six⁶ thinks he has found the true origin of the red-figured technique. It is a series of vases which show a dark ground with figures painted *over* it in white, reddish brown, cream-white, and occasionally some yellow; in two fragments among those found on the Acropolis the ground is dark brown with figures in gray. He assigns the whole class to a school at Athens, and shows that the earlier ones belong to a period before the red-figured vases originated. Furtwängler⁷ classifies them all as red-figured. It is well known that in many of the Attic black-figured vases the artist used white and red over the black of the figures to such an extent that sometimes this extra color almost concealed the black, and produced a very different effect from the monochrome black-figured vases; such figures were so much gayer and lighter in their total effect as to be of nearly the same value as the clay background, so that there was no contrast.

During the later period of black-figured vases the whole vase was covered with a glaze except on the two small panels; that, in itself, was a preparation for the next step, which was a most natural one, namely, to bring the black glaze up to the picture

¹ Tsountas and Manatt, *Mycenaean Age*, p. 395; *Eph. Arch.* 1896, pls. i and ii.

² *Monumenti Antichi*, VI, pls. ix, x.

³ *Naucratis*, Egypt Explor. Fund, p. 49.

⁴ *J.H.S.* VI (1885), p. 188, note 2.

⁵ *Am. J. Arch.*, First Series, II (1886), p. 406.

⁶ Six, 'Vases Polychromes sur Fond Noir,' *Gaz. Arch.* 1888, pp. 193 ff. and 281 ff.

⁷ Furtwängler, *Vasensammlung im Antiquarium* (Berlin), Nos. 2239-2244 and 4038; while he classifies them all as red-figured, he says of No. 2239 that its style is nearer the black- than the red-figured technique.

to serve as a background for the light figures. We find a similar effort to express the contrast on even earlier monuments, as in the frequent recurrence on black-figured vases of a white emblem adorning a black shield, or in the grave stelae such as that of Lyseas, showing a light figure against a dark ground. It is here that Loescheke¹ sees the origin of the red-figured technique.

Hoppin finds the origin of the "polychrome" technique in the technique of certain fragments,² found in the excavations at the Heraeum, to which he has applied the term "Dorian"; those most striking in this connection show a cream-white design on a dark red ground and may well be considered the prototype of the later "polychrome" fragments found on the Acropolis. There is little doubt that in the seventh century the influence of this "Dorian technique" was spread throughout Greece and Asia Minor pretty widely, and it seems probable that it should have suggested the use of color as we find it on such stelae as that of Lyseas and on the Clazomenae sarcophagi; but while the influence may at first have been from ceramics to terra-cotta and sculpture, in later times the trend of influence may have been in the opposite direction, so that these works may, in their turn, have influenced the later vase-painters.

No treatment of this subject would be at all complete which did not mention Klein's theory³ that the origin of the red-figured technique is to be found in the Gorgoneion on the inside of cylixes. The Gorgoneion surely affords a most striking variety of methods in the use of color; from its shape it lends itself easily to a round space, such as that of a shield, or the inside of a plate or cylix. We find it in pure black-figured technique on red ground, or with details picked out in color; we find it in white on a black shield, or in black on a white shield; in some black-figured plates and cylixes we find

¹ *Athen. Mitth.* IV, p. 36.

² These will be published by Dr. Hoppin in the forthcoming publication of the vases found at the Argive Heraeum.

³ Klein, *Euphronios*, pp. 32 ff.

the face left the color of the clay, with the details and outlines incised and extra color used; finally, we find it in pure red-figured technique with no extra color or incised lines. The Gorgoneion serves, then, as an excellent illustration of the truth of the statement that the sixth century was an age of experiment seeking for the most effective use of color; but, so far as I can find, it shows nothing that has not its parallel elsewhere.

One of the most interesting combinations of different techniques is found on a sarcophagus from Clazomenae in the museum at Berlin.¹ The decoration of the lower part is in the black-figured technique; that of the upper part in a technique resembling the red-figured, but differing from it in having a preliminary white slip upon which the picture was drawn. As a subordinate decoration are two heads in this same technique, and also two outline heads.² This is one of the latest of the sarcophagi, belonging, according to Zahn, to a period not earlier than the middle of the sixth century. He thinks that the origin of both black- and red-figured vases is to be sought in Clazomenae. But even if we had much clearer evidence than we have at present of the direct influence of Clazomenae upon Attic ceramic art, it would seem unnecessary to seek there what may be found much nearer.

From all the examples given, it will be clearly seen that in the Greek art of the sixth century there was a growing tendency in terra-cottas, sculpture, and vase-painting toward the use of a light color for the figures and some dark color for the background. We have found the "polychrome" technique, whose origin we need no longer seek in the Orient but in the

¹ Mentioned by Dr. Zahn in a paper read by him before the German Institute at Athens, February 16, 1898 (see *Athen. Mitth.* XXIII, 1898, p. 38), and published in the *Antike Denkmäler*, II, pl. 25.

² It has been suggested that drawing in outline may have formed an intermediate step between the black-figured and red-figured techniques. This may have had some influence in suggesting the red-figured technique, but since it can be traced back to Mycenaean influence (Joubin, *B.C.H.* 1895, pp. 69 ff.) and is found on vases of various periods and localities, it can hardly be said to have been the intermediate step which led to the origin of red-figured technique.

old Argive pottery of the so-called "Dorian technique," prevalent in vases of the period previous to those of the red-figured technique at Athens ; we have found a certain class of these which seem to have been the work of an Athenian school, showing the vase entirely covered with a dark slip and the figures painted over it in light colors. We have found the same relative arrangement of color in grave stelae and terra-cotta sarcophagi. But that in any one of these *exclusively* is to be found the origin of the red-figured technique in vases seems a most inadequate theory ; rather do they *all* express the same tendency. But on the other hand, with all these works about him to suggest the idea consciously or unconsciously, what would be more natural than that some ingenious vase-painter should conceive the idea that it would be much simpler to paint around the outline of the picture in black, *leaving the figures the color of the clay*, and then fill in the background with black, instead of pursuing the older method ? At first not realizing that all the details could be brought out most richly and simply in black, he would cling to the old tradition of "extra color" for certain parts ; but gradually even that reminiscence of the old technique would vanish, his tools would be perfected, his hand become more skilled, and there would be established the fully developed red-figured technique in all its severe simplicity.

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